AMENDMENTS TO THE SPECIFICATION:

Page 1, lines 7-11:

This application also describes and claims subject matter that is described in co-pending United States patent application filed simultaneously herewith and entitled: "METHOD AND APPARATUS FOR WEB-SITE-INDEPENDENT PERSONALIZATION FROM MULTIPLE SITES HAVING USER-DETERMINED INDIVIDUAL REFRESH RATES", Serial No. 09/650,144.

Page 2, lines 18-26 through Page 3, lines 1-15:

An important characteristic of Web information is that it may change frequently. For example, news sites may be updated hourly, financial sites may update stock prices every 20 minutes, weather updates are provided every three hours, online classified ads change daily, etc. Thus, in creating each Web clipping component of the composite personal Web view, the user can specify an independent refresh rate for that clipping. If the user, in creating that Web clipping does not specify a refresh rate, then a default refresh rate is set when the Web view is active. Further, in creating each clipping the user can specify a notification mechanism for alerting him or whomever or whatever he designates when the occurrence of a specified event condition is detected upon a refresh of that Web clipping. Thus, for example, if a clipping on the personalized page contains specified current stock prices from a selected Web site, the user can incorporate as part of the personalized page a notification mechanism that alerts

him by email, by an automatically generated phone call, by page, or by other methods, when, for example, there has been any change at all in the extracted stock information or, employing a finer level of comparison, if one or more of the specified stocks has changed in value by some absolute or percentage basis since either the last refresh instance or since some plurality of past refresh instances. The creation of a personal Web view consisting of multiple Web clippings in which each clipping has an individual refresh rate and notification mechanism is the subject of the above noted co-pending patent application entitled "Method and Apparatus for Web-Site-Independent Personalization From Multiple Sites Having User-Determined Individual Refresh Rates", Serial No. 09/650,144, filed simultaneously herewith.

Page 6, lines 3-26 through Page 7, lines 1-2:

The creation of the Web view is effected through the user's browser 103 in conjunction with a personalization applet (PA) 104 that is either stored on the user's machine or is available for downloading from an accessible server on the Internet or a local intranet. The PA 104 enables the user to customize access scripts that are generated from smart bookmarks or site descriptions (an extension of navigation maps). Smart bookmarks, and how they are created and replayed, are the subject of a co-pending patent application Serial No. 09/387571 entitled ~~"Method for Providing Fast Access to Dynamic Content on the World Wide Web"~~ "Method For Creating And Playing Back A Smart Bookmark That Automatically Retrieves A Requested Web Page Through A Plurality Of

Intermediate Web Pages", filed August 31, 1999, now U. S. Patent 6,535,912 issued March 18, 2003, and in a paper entitled "Automating Web Navigation with the WebVCR", by V. Anupam, J. Freire, B. Kumar and D, Lieuwen, *Proc. of WWW*, pages, 503-517, 2000, which are incorporated herein by reference. Navigation maps are the subject of co-pending patent application Serial No. 09/263679 entitled "Method and Apparatus for Querying Dynamic Web Content", co-pending patent application Serial No. 09/263680 entitled "Method and Apparatus for Extracting Navigation Maps From Web Sites", both filed March 5, 1999, and a paper entitled "A Layered Architecture for Querying Dynamic Web Content", by H. Davulcu, J. Freire, M. Kifer, and I. Ramakrishnan, *Proc. of SIGMOD*, pages 491-502, 1999, which are both incorporated herein by reference. Site descriptions extend navigation maps in two significant ways: they provide more flexibility in the selection as well as format of retrieved information; and they also provide a finer-grained specification of input and output parameters for retrieving information from specific nodes in the site description graph. Site descriptions are the subject of a paper entitled "Personalizing the Web Using Site Descriptions" by V. Anupam, Y. Breitbart, J. Freire, and B. Kumar, *Proceedings of DEXA Workshop 1999,* pages 732-738, and is incorporated herein by reference.

Page 7, lines 3-25:

Each source Web page that contains information that is included in a composite Web view can be accessed either by directly accessing the URL of a

Web page on which the desired information resides, or by selecting a node (or a set of nodes) in the site description where the desired information resides (alternatively, handles that represent such information and that encode the access path to the desired information can also be selected), or by a smart bookmark. Selected nodes, handles, or smart bookmarks encode a series of navigation steps that lead to the Web page with the desired information. Pre-established smart bookmarks and site descriptions that enable a user to directly access desired information that would otherwise require multiple navigation steps by the user can be accessed either locally on the client terminal 101 in smart bookmarks file 105 or site descriptions database 106, respectively. Alternatively, a pre-existing smart bookmark can be accessed through the World Wide Web (WWW) 107 from a server 108 through which the desired smart bookmark is stored as a smart bookmarks file109. Similarly, a pre-existing site description can be accessed through the WWW 107 from a server 110 through which such site descriptions/navigation maps are stored in a site descriptions database 111. If a smart bookmark or a site description is not available to access information which cannot be directly accessed through the input of a URL and would otherwise require a series of navigation steps to retrieve, the user can create either a smart bookmark or a site description on demand as the Web clipping is being created. Creation of such smart bookmarks and site descriptions/navigation maps are described in the aforenoted ~~co-pending~~ U.S. Patent No. 6,535,912 patent ~~applications~~.

Page 7, lines 26-27 through Page 8, lines 1-8:

Once a Web view has been created by the user, it can be stored locally on the user's machine in a Web views application database 112 for later access by the user. In this mode, the creation and display of the Web view through the PA acts as the user's personal tool. All steps involved in the creation and display of the Web view occurs within the user's machine and are stored in that machine. Advantageously, the user is able to maintain complete privacy over his view and the information in that view. Alternatively, a Web view can be created through a personalization server 114 connected to WWW 107 and stored in a Web views database 115. Users from anywhere on the Web may then have access to the Web views stored in the Web views database 115 which are accessed through server 114.

Page 8, lines 22-27:

The Web view manager 201, within the personalization applet 200 functions to assemble various Web clippings together to form the view. It provides the user with the ability to specify how the resulting information content in the Web clipping will be physically arranged in the browser. The Web view manager 201 is also responsible for storing the Web view specification in Web views database 212 when the Web view has been completed.

Page 9, lines 1-27 through Page 10, lines 1-5:

The Web clipping manager 202 is responsible for the creation of the individual Web clippings that constitute the Web view through the selection of access scripts, and the customization and specification of the extraction of requested information content from the Web page that contains that information. In response to the user's request to create a Web clipping after initiating a request to create a new Web view, the Web clipping manager 202 signals the access script manager 203. The access script manager creates a script to 1) access a single URL if the clipping is reachable through the input of that URL; 2) read and customize an existing smart bookmark from smart bookmark file 213 to access the information to which that smart bookmark leads; or 3) read and customize an existing handle generated from a site description/navigation map from site descriptions database 214 to access the information to which that navigation map leads. If no such smart bookmark exists, a smart bookmark can be created through a smart bookmark recorder/player 204 and then saved in the smart bookmark file 213. Similarly, a site description/navigation map can be created by site description recorder/player 205 and then saved in the site descriptions database 214. Access script manager 203 then creates a script to access the desired information from the customized smart bookmark, the customized site description, or the direct URL, which is returned to the Web clipping manager 202 together with the retrieved Web page. That script consists of a sequence of executable steps that are going to retrieve the desired information. For a smart bookmark, those steps are a sequence of navigation

steps. A site description is a tree where each node in the tree represents a Web page, and edges between nodes represent actions that are required to go from one page to the next. The tree encoded by a site description can be displayed on a GUI. The user may then select one or more nodes in that tree through the GUI, and given that selection, algorithms as described in the previously noted co-pending patent applications relating to navigation maps, are used to generate a script to access the selected page. Alternatively, handles that are pre-generated for particular nodes in the tree can be selected. If a single URL is specified for the Web clipping, the access script for that clipping consists of a single step to retrieve that Web page at that URL.

Page 11, lines 3-27 through Page 12, lines 1-6:

A smart bookmark may also be parameterized, in which case the user must specify the required parameters. As with site descriptions, once the parameters are specified, a completely bound smart bookmark is generated (similar to a navigation expression) which can be replayed by a smart bookmark player, as described in the above-mentioned ~~patent application, Serial No. 09/387571~~ issued U. S. Patent No. 6,535,912. As described above for site descriptions, the smart bookmark need not be bound to a fixed set of attribute values. When the Web view is replayed, the user can be prompted to enter a particular attribute value. As an example, if a smart bookmark is to a Web site which provides current stock ticker information, the stock symbols for the stock(s) of interest will need to be inputted by the user. These symbols can be saved in

the Web clipping specification, in which case information about the same stocks will always be retrieved until the Web clipping is modified, or the user can be prompted to enter the stock symbols of current interest, in which case the clipping will not contain the information relating to those stocks, but will contain a specification for the user to input those symbols when the clipping is later replayed. Similarly, if the clipping is from a Web site that provides the current value of the user's own 401(k) plan, the attributes that are likely going to need to be specified will include, for example, a login and a password. Such attributes can be specified when creating the Web clipping and saved as part of the clipping so that when the Web view is later replayed, the Web clipping with the user's personal information is automatically retrieved and made part of the view. Alternatively, rather than incorporating such user-personal information into the Web view, when the Web view is later replayed, the user can be prompted for those particular attributes before the information in that particular Web clipping is retrieved and displayed. This feature is useful not only for security reasons (e.g., a user may not want to save a password), but also for creating general clippings and views that can be shared by a group of users. Note that once a generic clipping is created, users can download and customize them. For example, if a generic clipping is created for the 401(k) site, a user may customize it with his own personal information such as his login name and password.

Page 16, lines 9-16:

Web clipping manager 202, having completed the Web clipping, forwards the specification of this completed clipping to the Web view manager 201. All the information that has been inputted by the user that defines the individual Web clippings and the composite Web view is stored as a Web view in a Web views database 212 that is local to the user's machine. Alternatively, the Web view can be stored in a Web views database 216 associated with a trusted third party server 217 on the World Wide Web 218, which can be accessed by the user who created the Web view or any other user.

Page 19, lines 24-27 through Page 20, lines 1-13:

A user who wants to replay a Web view that he or someone else has created that is either stored locally on the user's own machine in database 112 (in FIG. 1) or remotely on the Web in database 115 in association with a server 114 needs to execute a personalization Web view applet or Web view application. The personalization applet necessary to run the Web view may also be stored locally on the user's machine or can be downloaded on demand from anywhere. The applet lets the user select the Web view he wants displayed and performs the necessary processing for displaying the Web view in the user's browser. Alternatively, with reference again to Fig. 1, a server elsewhere (e.g., server 120) may have a Web view application 121 (in C program language or any other programming language) running on it. Given the Web view specification via a URL of where it is located, for example, the server on which the Web view

application is running will execute that specification and return the final Web view to the requesting client. In this Web service model, therefore, the server on which the Web view application is resident can provide service to a plurality of different users who only need to specify the URL of the specification of the particular Web view they want to execute.

Page 20, lines 20-27 through Page 21, lines 1-19:

With reference to FIG. 6, it is assumed for purposes of example that the Web view specification is stored locally in a Web views database 601 associated with the requesting user's machine and a personalization applet (PA) 602 is stored locally on that machine. The user, when wanting to execute and replay a Web view, selects the desired Web view through his browser 603, which starts PA 602. The Web view manager 604 then reads the selected Web view specification in database 601. A clipping specification within that Web view specification is selected and Web clipping manager 605 calls upon access script manager 606 to execute the access script to which the clipping points. Access script manager 606 then retrieves the Web page to which it is directed by the access script. This may involve executing a smart bookmark with specified inputs via smart bookmark recorder/player 607, which retrieves that page from over the World Wide Web 610; executing a navigation expression with specified inputs and outputs by site description recorder/player 608, which retrieves the page from the Web 610; or directly accessing a Web page at a URL specified in the access script. For the case of a smart bookmark or navigation expression,

for bindings not incorporated within the access script, the user will be prompted to input whatever information is necessary to retrieve the Web page needed to create the Web clipping. Regardless of from where the Web page is retrieved, it is returned to Web clipping manager 605 where after cleaning up and parsing the page via the parser 615, the extractor 611 applies the Web clipping's extraction expression to it. If a clipping is not accessible, an error message is generated for that clipping. After extractor 611 applies the extraction expression to the retrieved Web page the clipping is returned to the Web view manager 604. The physical view of that clipping, which can be, for example, a frame or a layer as specified by the Web view creator, is then created in the browser in accordance with the layout as defined in the clipping.